STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Tollution Collifor Act (Tublic Eaw 72	-500, 72 Congressy as amended,						
Permit No.	MO-0111759						
Owner: Address:	Cedar Grove Village Homeowners Association #8 Cedar Grove, Warrenton, MO 63383						
Continuing Authority: Address:	Same as above Same as above						
Facility Name: Address: Legal Description:	Cedar Grove Village Subdivision #8 Cedar Grove, Warrenton, MO 63383 SW ¹ / ₄ , SE ¹ / ₄ , Sec 36, T47N, R3W, Warren County						
Receiving Stream: First Classified Stream and ID: USGS Basin & Sub-watershed No.:	Tributary to Lost Creek (U) Lost Creek (C) (1618) 10300200 - 060002						
is authorized to discharge from the factors as set forth herein: FACILITY DESCRIPTION Outfall #001 – Subdivision - SIC #4	cility described herein, in accordance with the effluent limitations and monitoring requirements 1952						
Extended aeration/ aerated sludge in Design population equivalent is 100. Design flow is 10,000 gallons per day. Actual flow is 5,100 gallons per day. Design sludge production is 1.8 dry to							
	er discharges under the Missouri Clean Water Law and the National Pollutant Discharge to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of						
April 21, 2006 Effective Date	Doyle Childers, Director, Department of Natural Resources Executive Secretary, Clean Water Commission						
April 20, 2011							

Mike Struckhoff, Director, St. Louis Regional Office

Expiration Date

MO 780-0041 (10-93)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PAGE NUMBER 2 of 5

PERMIT NUMBER MO-0111759

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The **interim** effluent limitations shall become effective upon issuance and remain in effect until **August 31, 2009**. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

		INTERIM EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #001						
Flow	MGD	*		*	Once/ Month	24 hr. estimate
Biochemical Oxygen Demand ₅	mg/L		45	30	Once/ quarter**	Note 1
Total Suspended Solids	mg/L		45	30	Once/ quarter**	Note 1
Temperature	°C	*		*	Once/ quarter**	grab
pH – Units	SU	***		***	Once/ quarter**	grab
Ammonia	mg/L	*		*	Once/ quarter**	grab
Fecal Coliform (Note 2)	#/100mL	*		*	Once/ quarter**	grab
Total Residual Chlorine (TRC)	mg/L	*		*	Once/ quarter**	grab

MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u>; THE FIRST REPORT IS DUE <u>October 28, 2006</u>. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u>, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- **. Sample once per quarter in the months of February, May, August, and November.
- *** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.
- Note 1 A composite sample made up from a minimum of four grab samples collected within a 24-hour period with a minimum of two hours between each grab sample
- Note 2 Disinfection is required during the recreational season of April 1 to October 31.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PAGE NUMBER 3 of 5

PERMIT NUMBER MO-0111759

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective **September 1, 2009** and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

		FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #001						
Flow	MGD	*		*	Once/ Month	24 hr. estimate
Biochemical Oxygen Demand ₅	mg/L		45	30	Once/ Quarter**	Note 1
Total Suspended Solids	mg/L		45	30	Once/ Quarter**	Note 1
Temperature	°C	*		*	Once/ Quarter**	grab
pH – Units	SU	***		***	Once/ Quarter**	grab
Ammonia	mg/L	*		*	Once/ Quarter**	grab
Fecal Coliform (Note 2)	#/100mL	1000		400	Once/ Quarter**	grab
Total Residual Chlorine (TRC) (Note 3)	mg/L	0.019 (.13ML)		0.010 (.13ML)	Once/ Quarter**	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE January 28, 2010. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u>, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- **. Sample once per quarter in the months of February, May, August, and November.
- *** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.
- Note 1 A composite sample made up from a minimum of four grab samples collected within a 24-hour period with a minimum of two hours between each grab sample
- Note 2 Disinfection is required during the recreational season of April 1 to October 31.
- Note 3 This permit contains a Total Residual Chlorine (TRC) limit.
- (a) This effluent limit is below the minimum quantification level (ML) of the most common and practical EPA approved CLTRC methods. The department has determined the current acceptable ML for total residual chlorine to be 0.13 mg/L when using the DPD Colorimetric Method #4500 CL G. from Standard Methods for the Examination of Waters and Wastewater. The permittee will conduct analyses in accordance with this method, or equivalent, and report actual analytical values. Measured values greater than or equal to the minimum quantification level of 0.13 mg/L will be considered violations of the permit and values less than the minimum quantification level of 0.13 mg/L will be considered to be in compliance with the permit limitation. The minimum quantification level does not authorize the discharge of chlorine in excess of the effluent limits stated in the permit.
- (b) Disinfection is required year-round unless the permit specifically states that "Final limitations and monitoring requirements for Fecal Coliform are applicable only during the recreational season from April 1 through October 31." If your permit does not require disinfection during the non-recreational months, <u>do not chlorinate in those months</u>.
- (c) Do not chemically dechlorinate if it is not needed to meet the limits in your permit.
- (d) If no chlorine was used in a given sampling period, an actual analysis is not necessary. Simply report as "0 mg/L" TRC.

C. SPECIAL CONDITIONS

- 1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

- 2. All outfalls must be clearly marked in the field.
- 3. Permittee will cease discharge by connection to areawide wastewater treatment system within 90 days of notice of its availability.
- 4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 μ g/L);
 - (2) Two hundred micrograms per liter (200 μ g/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μ g/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
- (c) That the effluent limit established in Part A of the permit will be exceeded.
- 5. Report as no-discharge when a discharge does not occur during the report period.
- 6. Water Quality Standards
 - (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
 - (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses.
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life:
 - (5) There shall be no significant human health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

C. SPECIAL CONDITIONS (continued)

- 7. Sludge and Biosolids Use For Domestic Wastewater Treatment Facilities
 - (a) Permittee shall comply with the pollutant limitations, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions.
 - (b) If sludge is not removed by a contract hauler, permittee is authorized to land apply biosolids. Permit Standard Conditions, Part III shall apply to the land application of biosolids. Permittee shall notify the department at least 180 days prior to the planned removal of biosolids. The department may require submittal of a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis.

D. SCHEDULE OF COMPLIANCE

The final daily maximum and monthly average Fecal Coliform limits of 400/100 mL and 1000/100 mL, respectively, and the final daily maximum and monthly average Total Residual Chlorine (TRC) limits of 0.019 mg/L and 0.010 mg/L, respectively, shall become effective September 1, 2009 unless items 2 or 3 below are approved by the Department. The Effluent Regulation, 10 CSR 20-7.015(9)(H) allows the permittee to:

- 1. Install disinfection facilities (this option requires a construction permit from the Department of Natural Resources), or
- 2. Present an evaluation to show that disinfection is not required to protect one or both recreational uses, or;
- 3. Present a Use Attainability Analysis (UAA) that demonstrates one or both designated recreational uses are not attainable in the classified waters receiving the effluent.